

CLAIMS:

1. A power saving management device comprising:
a controller;
5 a light sensor in communication with said controller 105 for providing status of whether or not light is sensed by the sensor; and
a power circuitry module in communication with the controller and with at least one of a predetermined non-essential circuitry and a display,
wherein the controller signals said power circuitry module to power on said at
10 least one of a predetermined non-essential circuitry and the display when an amount of light sensed by the light sensor reaches a first predetermined threshold amount.
2. The device according to claim 1, wherein the non-essential circuitry comprises one or more of predetermined non-essential circuitry comprising: non-essential
15 storage or mediums that require either constant power or at least a periodic refreshing, including a diskette drive and a controller, a cd/dvd or other types of drives and respective controllers, expanded storage, cache storage, predetermined communication circuitry, output ports, a transmitter, and sound circuitry.
- 20 3. The device according to claim 1, wherein the non-essential circuitry comprises a backlight, and the controller signals said power circuitry module to power on said backlight when an amount of light sensed by the light sensor is greater than or equal to a first predetermined threshold amount but less than a second predetermined threshold amount that is higher than said first predetermined amount.
- 25 4. The device according to claim 3, wherein the controller signals said power circuitry module to power off said backlight when an amount of the light sensed by the light sensor is greater than the second predetermined threshold amount.

5. The device according to claim 1, wherein the controller signals said power circuitry module to power off the display if an amount of light being sensed by the sensor goes below the first predetermined threshold amount.

5 6. The device according to claim 1, further comprising a tilt switch arranged so that the controller signals the power circuitry module to power on when the device is oriented at an angle greater than zero degrees and less than ninety degrees.

7. The device according to claim 1, wherein the controller determines
10 whether a device is still in use when an amount of light sensed by the light sensor goes below the first predetermined threshold, and powers off the display if it is determined that the device is not in use for a predetermined amount of time subsequent to the light sensed dropping below said first predetermined threshold amount.

8. The device according to claim 1, wherein the controller determines
15 whether a device is still in use regardless of whether or not when an amount of light sensed by the light sensor goes below the first predetermined threshold, and the controller signals the power circuitry module to power off the display if it is determined that the device is not in use for a predetermined amount of time.

20 9. A power saving management device comprising:
a controller;
a pressure sensor in communication with said controller for providing status of whether or not light is sensed by the sensor; and
a power circuitry module in communication with the controller and with at least
25 one of predetermined non-essential circuitry and a display,
wherein the controller signals said power circuitry module to power on at least one of said predetermined non-essential circuitry and said display when an amount of pressured sensed by the pressure sensor reaches a first predetermined threshold pressure amount.

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10. The power saving management device according to claim 9, further comprising:

a base;

two sides arranged at a substantially perpendicular angle to the base;

5 wherein the pressure sensor is arranged against one of the two sides at a location wherein a user is likely to grip the device; and

wherein the pressure sensor is adapted for detecting a change in pressure against at least one of the two sides when gripped by a user.

10 11. The device according to claim 10, further comprising a plurality of sensors arranged substantially along the two sides of the device.

12. The device according to claim 11, wherein the plurality of sensors comprise piezoelectric thin film (PZT) sensors.

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13. The device according to claim 11, wherein the plurality of sensors for at least one side are arranged in an array.

14. The device according to claim 11, wherein the plurality of sensors
20 comprise electro-resistive sensors.

15. The device according to claim 11, wherein the plurality of sensors comprise Micro-Electromechanical Systems (MEMS) sensors.

25 16. The device according to claim 10, further comprising a face arranged opposite to said base and substantially perpendicular to the two sides, and wherein the display is arranged therein.

30 17. The device according to claim 16, further comprising a sensor arranged on a face of the device, said sensor being in communication with said controller and an output

of said sensor and an output of said pressure sensor being respectively connected to inputs of a logic AND gate, so that the controller signals said power circuitry module to power on said display only when both an output sensed by the sensor and an output of pressure sensed by said pressure sensor is greater than or equal to their respective first predetermined threshold amounts.

18. The device according to claim 17, wherein the controller signals said power circuitry module to power partially power on said predetermined non-essential circuitry when an amount sensed by the sensor is greater than or equal to a first predetermined threshold, and to fully power said predetermined non-essential circuitry when an amount sensed is a second predetermined threshold amount that is higher than said first predetermined amount.

19. The device according to claim 18, wherein the controller determines whether a device is still in use when an amount sensed by the sensor goes below the first predetermined threshold, and powers off the display if it is determined that the device is not in use for a predetermined amount of time subsequent to the sensed amount dropping below said first predetermined threshold amount.

20. A method for managing the saving of power in a device, comprising the steps of:

(a) determining by a sensor whether a light has exceeded a threshold level of brightness;

(b) signaling by the sensor to a controller/microprocessor that the light sensed in step (a) has exceeded a threshold;

(c) signaling by the controller/microprocessor signals to a power on/off predetermined non-essential circuitry about the sensed light;

(d) requesting by the controller/microprocessor to the power on/off circuitry to power on at least one of a display or the predetermined non-essential circuitry;

(e) determining whether the light sensed by the sensor continues to exceed the threshold level of brightness;

(f) determining whether or not the device is still in use if the light sensed by the sensor in step (e) no longer exceeds the threshold level of brightness; and

5 (g) powering off the display and/or the non-essential circuitry powered on in step (d) to save power if the detected light no longer exceeds the threshold level and it has been determined in step (f) that the device is not in use.

10 21. A method for managing power savings in a device, comprising the steps of:

(a) providing status of whether an output is active of a pressure sensor in communication with a controller;

(b) providing a power circuitry module in communication with the controller with at least one of predetermined non-essential circuitry and a display; and

15 (c) signaling by the controller to the power circuitry module to power on the display when an amount of pressured sensed by the pressure sensor reaches a first predetermined threshold pressure amount.

20 22. The power saving management method according to claim 21, further comprising the sub-steps in step (a) of:

(a) providing a base;

(b) arranging two sides at a substantially perpendicular angle to the base;

(c) arranging the two sides wherein the pressure sensor is adjacent at least one of the two sides at a location wherein a user is likely to grip the device; and

25 (d) detecting a change in pressure against at least one of the two sides when gripped by a user.